



## Current probe M3.UB 1A/1V

The M3.UB 1A/1V current probe has been designed for use with multimeters, recorders, safety testers etc. for accurate non intrusive measurement of AC current. Using the latest transformer technology, the M3.UB 1A/1V can measure currents from 10mA to 5A over a frequency range of 30Hz to 10kHz. The very small head facilitates the insertion of the probe in places where ease of access is of crucial importance.



### Electrical Characteristics

Current Range $I_n$ .....	: 1 A $AC_{RMS}$
Measuring Range.....	: 10mA to 5A $_{RMS}$
Output Sensitivity.....	: 1mV / 1 mA
Load Impedance.....	: $\geq 1$ MOhm
Conductor Position Sensitivity.....	: < 0.5% @ 50/60Hz
Error due to adjacent conductor.....	: $\leq 15$ mA / A @ 50 Hz
Phase Shift at 2 kHz @ 10A.....	: $\pm 1$ degré
Frequency Range.....	: 30 Hz to 10 kHz
Temperature Coefficient.....	: 0.015% / °C
Working Voltage (see Safety Standards section).....	: 600 V $AC_{RMS}$ or DC

### Accuracy

Primary Current	10mA to 100mA	100mA to 1A	1A to 7A
Accuracy (of rdg)	$\pm 5\%$	$\pm 2\%$	$\pm 1\%$

### General Characteristics

Maximum Conductor Size.....	: 15 mm diameter, bus bar 15 x 17mm
Output Connection.....	: Safety sockets 4mm
Operating Temperature Range.....	: -10 to +55 °C
Storage Temperature Range.....	: -20 to +70 °C
Operating Humidity.....	: 15% to 85% (non condensing)
Weight.....	: 165 g

**Reference conditions:** Temperature : +18°C to 26 °C, humidity: 20 to 75% RH, sinusoidal current: 48 to 65Hz, distortion factor: < 1%, DC current: none, DC magnetic field: 40 A/m earth's magnetic field, alternative magnetic field: none, proximity of external conductor: none, primary conductor: centred in the aperture, load impedance:  $\geq 1\text{M}\Omega$ , <100pF for voltage output.

## Safety Standards

IEC61010-1:2010  
IEC61010-2-032:2012  
IEC61010-2-031:2008

600 V<sub>RMS</sub>, Category III, Pollution Degree 2

Use of the probe on **uninsulated conductors** is limited to 600 V AC<sub>RMS</sub> or DC and frequencies below 1 kHz.

## EMC Standards

EN 61326 :1998

## Dimensions

in mm

